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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,897	12/17/2003	Bogdan Timus	4147-56	9093

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EXAMINER	
NGUYEN, TU X	

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/736,897	TIMUS ET AL.	
	Examiner	Art Unit	
	Tu X. Nguyen	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/04/04; 5/24/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 5/24/05 and 11/04/05 were being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-13 and 15-32, are rejected under 35 U.S.C. 102(e) as being anticipated by Laakso (US Patent 6,671,512).

Regarding claim 1, Laakso discloses a method for power control in a communication system including a transceiver node capable of communicating with multiple mobile terminals, comprising the steps of:

receiving, at the transceiver node (see col.3 lines 44-45), a transmitter power change request from one of the mobile terminals over a wireless connection (see col.2 lines 24-25, Laakso teaches uplink TPC command is a request power change at the base station);

determining, at the transceiver node, at least one power control parameter for the connection (see col.10 lines 16-34, "non-real time users", "real-time users" corresponds to

"power control parameter for the connection") based on a current total transmitter power of the transceiver node (see col.9 lines 49-51, col.19 lines 15-16); and

distributing transmitter power to the connection in accordance with the determined power control parameter (see col.10 lines 15-32, Laakso teaches different power distribution for different users such as packet scheduling for non-real time user, lower Eb/No target for real-time users).

Regarding claim 2, Laakso discloses the current total transmitter power represents substantially all downlink power resources, common and connection-specific, used at the transceiver node at a particular point of time (see col.4 line 19 through col.9 line 30, "periodically monitor" corresponds to "at a particular point of time").

Regarding claim 3, Laakso discloses the step of measuring the current total transmitter power at the transceiver node (see col.2 lines 37-44).

Regarding claim 4, Laakso discloses the determining step is further based on a current connection-specific transmitter power for the connection (see col.10 lines 29-30, "the most critical downlink connections" corresponds to "connection-specific").

Regarding claim 5, Laakso discloses the total transmitter power is a downlink carrier power (see col.17 lines 35-41) and the connection-specific transmitter power is a downlink code power (see col.14 lines 20-44, different connection types, real-time or non-real time, is a different power distribution).

Regarding claim 6, Laakso discloses the determining step is further based on connection-specific information indicating the degree of priority associated with the connection (see col.14 lines 15-20).

Regarding claim 7, Laakso discloses the connection-specific information comprises information selected from the group of: mobile type, mobile class (see col.14 lines 15-20), subscription class, connection time, transmitted data amount, data amount in buffer, packet length, packet type (see col.4 lines 1-7, "non-real time data packet" corresponds to "packet type"), time since last packet, block error statistics, and block retransmission statistics.

Regarding claim 8, Laakso discloses the power control parameter is related to a maximum value of the connection-specific transmitter power (see col.17 lines 35-57).

Regarding claim 9, Laakso discloses the power control parameter is directly or indirectly related to a power change rate of the connection-specific transmitter power (see col.10 lines 25-26).

Regarding claim 10, Laakso discloses the power control parameter is related to a probability of grant (col.13 lines 44-61, equations 1 and 2 demonstrate the probability of transmission power parameter related granting power for each type of user).

Regarding claim 11, Laakso discloses the power control parameter is related to a power change step size (see col.14 lines 36-46, 0.5dB or 1dB is power change step size).

Regarding claim 12, Laakso discloses at the transceiver node, at least two power control parameters based on different input parameters into an aggregate power control parameter (see col.7 line lines 40-65, Laakso teaches total transmission power based on different input parameters such as power transmission for real-time connection and non-real time connection); and using the aggregate power control parameter for distributing the connection-specific transmitter power in the distributing step (see col.10 lines 15-32).

Regarding claim 13, Laakso discloses the determining step involves executing a predetermined power control function presenting a smooth transitional behavior as the current total transmitter power of the transceiver node approaches a maximum total transmitter power value (see col.17 lines 35-57, Laakso teaches when the transmission power approaches maximum value, the baser station perform plurality of steps such as packet scheduling for non-real time traffic, decrease bit rates).

Regarding claim 14, Laakso discloses the determining step involves deciding the power control parameter based on a predetermined threshold value for the total transmitter power (see col.17 lines 5-22).

Regarding claim 16, Laakso discloses a transceiver node (see col.3 lines 44-45) capable of communicating with multiple mobile terminals (see col.3 lines 37-38) in a communication system with means for power control, comprising

means for receiving a transmitter power change request from one of the mobile terminals over a wireless connection (see col.2 lines 24-25, Laakso teaches uplink TPC command is a request power change at the base station); means for determining at least one power control parameter for the connection (see col.10 lines 16-34, "non-real time users", "real-time users" corresponds to "power control parameter for the connection") based on a current total transmitter power of the transceiver node (see col.9 lines 49-51, col.19 lines 15-16); and

means for distributing transmitter power to the connection in accordance with the determined power control parameter (see col.10 lines 15-32).

Regarding claim 17, Laakso discloses the current total transmitter power represents substantially all downlink power resources, common and connection-specific, used at the transceiver node at a particular point of time (see col.4 line 19 through col.9 line 30, "periodically monitor" corresponds to "at a particular point of time").

Regarding claim 18, Laakso discloses the determining step is further based on a current connection-specific transmitter power for the connection (see col.10 lines 15-32, Laakso teaches different power distribution for different users such as packet scheduling for non-real time user, lower Eb/No target for real-time users).

Regarding claim 19, Laakso discloses the total transmitter power is a downlink carrier power (see col.17 lines 35-41) and the connection-specific transmitter power is a downlink code power (see col.14 lines 5-14).

Regarding claim 20, Laakso discloses the determining step is further based on connection-specific information indicating the degree of priority associated with the connection (see col.14 lines 15-20).

Regarding claim 21, Laakso discloses the power control parameter is related to an item selected from the group of a maximum value of the connection-specific transmitter power, a probability of grant, and a power change step size (see col.14 lines 35-41).

Regarding claim 22, Laakso discloses means for combining at least two power control parameters based on different input parameters into an aggregate power control parameter (col.4 lines 35 through col.9 line 39); and means for using the aggregate power control parameter for adjustments of connection-specific transmitter power (see col.10 lines 15-32).

Regarding claim 23, Laakso discloses the determining step involves executing a predetermined power control function presenting a smooth transitional behavior as the current total transmitter power of the transceiver node approaches a maximum total transmitter power value (see col.17 lines 35-57, Laakso teaches when the transmission power approaches maximum value, the baser station perform plurality of steps such as packet scheduling for non-real time traffic, decrease bit rates).

Regarding claim 24, Laakso discloses the determining step involves deciding the power control parameter based on a predetermined threshold value for the total transmitter power (see col.17 lines 5-22).

Regarding claim 25, Laakso discloses a base station unit (see col.3 lines 44-45).

Regarding claim 26, Laakso discloses a communication system provided with means for power control and including a transceiver node capable of communicating with multiple mobile terminals, comprising means for receiving, at the transceiver node (see col.3 lines 44-45), a transmitter power change request from one of the mobile terminals over a wireless connection (see col.2 lines 24-25, Laakso teaches uplink TPC command is a request power change at the base station); means for determining at least one power control parameter for the connection (see col.10 lines 16-34, "non-real time users", "real-time users" corresponds to "power control parameter for the connection") based on a current total transmitter power of the transceiver node (see col.9 lines 49-51, col.19 lines 15-16); and means for distributing transmitter power to the connection in accordance with the determined power control parameter (see col.10 lines 15-32).

Regarding claim 27, Laakso discloses the current total transmitter power represents substantially all downlink power resources, common and connection-specific, used at the transceiver node at a particular point of time (see col.4 line 19 through col.9 line 30, "periodically monitor" corresponds to "at a particular point of time").

Regarding claim 28, Laakso discloses determining the power control parameter based on a current connection-specific transmitter power for the connection (see col.10 lines 29-30, "the most critical downlink connections" corresponds to "connection-specific").

Regarding claim 29, Laakso discloses means for determining the power control parameter based on connection-specific information indicating the degree of priority associated with the connection (see col.14 lines 15-20).

Regarding claim 30, Laakso discloses means for transmitting the connection-specific information from a network-based control unit of the communication system to the transceiver node (see col.3 lines 46-55 and col.10 lines 11-15).

Regarding claim 31, Laakso discloses the power control parameter is related to an item selected from the group of a maximum value of the connection-specific transmitter power (see col.17 lines 35-40), a probability of grant, and a power change step size (see col.14 lines 35-41).

Regarding claim 32, Laakso disclosesbeing selected from the group of: a Code Division Multiple Access (CDMA) system, a Wideband Code Division Multiple Access (WCDMA) system (see col.10 lines 6-7), an Orthogonal Frequency Division Multiplexing (OFDM) system, and a system using Multi Carrier Power Amplifiers (MCPA).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as being obvious over Laakso (US Patent 6,671,512) in view of Eibling et al. (US Patent 7,085,580).

Regarding claim 14, Laakso fails to disclose the determining step is based on current and previous values of the total transmitter power.

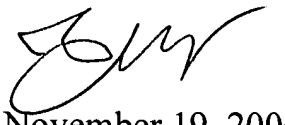
In the related art, a master controller determines an overload condition, Eibling et al. disclose the determining step is based on current and previous values of the total transmitter power (see col.3 lines 50-66). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Laakso with determining the power level of at least one forward-link signal of a base station for a measurement interval which is smaller than or equal to a frame (see Eibling, col.4 lines 1-40) teaching of Eibling et al. in order to prevent the damage of base station amplifier may exceed the maximum continuous power over an extended period of time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



November 19, 2006